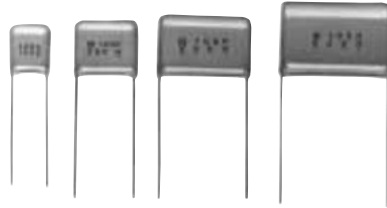


Metallized Polyester Film Capacitor

Type: **ECQE(F)**

Non-inductive construction using metallized Polyester film with flame retardant epoxy resin coating



■Features

- ◆ Self-healing property
- ◆ Excellent electrical characteristics
- ◆ Flame retardant epoxy resin coating

■Recommended Applications

- ◆ General purpose usage

■Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	12
E	C	Q	E							F	

Product code Dielectric & construction Rated volt. Capacitance Cap. Tol. Suffix Suffix

1	100VDC	10	1000VDC
2	250VDC	12	1250VDC
4	400VDC	1A	125VAC
6	630VDC	2A	250VAC

J	±5%
K	±10%
M	±20%

Blank	Type 1	Straight
B	Type 2	
W	Type 3	Crimped lead
3	Ammo	Crimped taping
9	Reel	Crimped taping

●Explanation of Part Number for Odd Size Taping

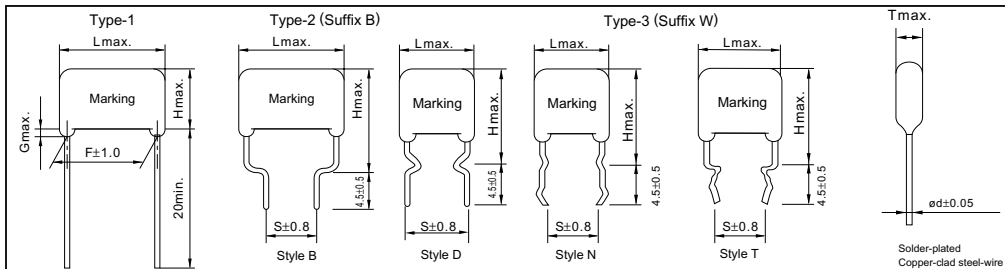
1	2	3	4	5	6	7	8	9	10	11	12
E	C	Q	E								

Product code Dielectric & construction Rated volt. Capacitance Suffix Cap. Tol. Suffix

■Specifications

Category temp. range	-40 to +85°C (+105°C.....75% of Rated voltage)		
Rated voltage	100VDC, 250VDC, 400VDC, 630VDC, 1000VDC, 1250VDC, 125VAC, 250VAC		
Capacitance range	0.001 to 10μF(E-12)		
Capacitance tolerance	±5%(J), ±10%(K), ±20%(M)		
Dissipation factor	1.0%max. (20°C, 1kHz)		
Withstand voltage	◆ Rated volt. 100V to 630VDC Between terminals : Rated volt.(VDC)×150% 60s		
	◆ Rated volt. 1000VDC, 1250VDC Between terminals : Rated volt.(VDC)×175% 2 to 5s or 1000VAC 60s Between terminals to enclosure : 1500VAC 60s		
	◆ Rated volt. 125VAC, 250VAC Between terminals : Rated volt.(VAC)×230% 60s Between terminals to enclosure : 1500VAC 60s		
Insulation resistance	100V to 630VDC:	$C \leq 0.33\mu\text{F}$: 9000MΩmin. (20°C, 100VDC 60s) $C > 0.33\mu\text{F}$: 3000MΩ . μFmin.	
	1000VDC, 1250VDC:	10000MΩmin. (20°C, 100VDC 60s) 2000MΩmin. (20°C, 500VDC 60s)	
	125VAC, 250VAC:	2000MΩmin. (20°C, 500VDC 60s)	

■Dimensions in mm(not to scale)

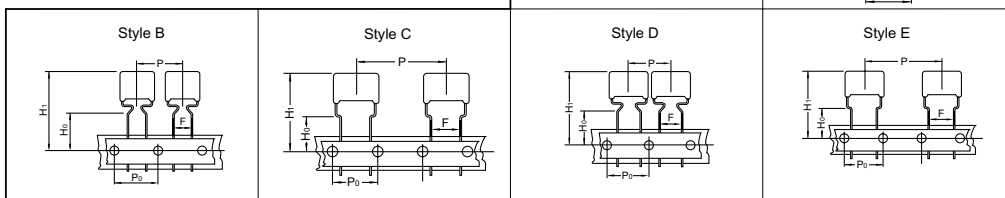


■Packaging Specifications for Bulk Package

Packing quantity: 100pcs./bag

■Taping Specifications for Automatic Insertion

●Taping style



●Packaging Specifications

Type	Rated volt.	Cap. range (μF)	Taping style							Packing	suffix
			AD	AS	AB	B	C	D	E		
ECQE (F)	100VDC	0.56 to 0.68	○							Ammo	() F3
		0.56 to 0.68	○							Reel	() F9
		0.82 to 1.0				○				Ammo	() F3
		1.2 to 3.3					○			Ammo	() F3
	250VDC	0.01 to 0.27	○						○	Ammo	R() F
		0.33				○				Ammo	() F3
		0.39 to 1.5					○			Ammo	() F3
		0.01 to 0.33						○		Ammo	R() F
	400VDC	0.39 to 1.5						○		Ammo	R() F
		0.01 to 0.1	○							Ammo	() F3
		0.12 to 0.47					○			Ammo	() F3
		0.01 to 0.1	○							Reel	() F9
	630VDC	0.01 to 0.1					○			Ammo	R() F
		0.12 to 0.47						○		Ammo	R() F
		0.01 to 0.033	○							Ammo	() F3
		0.039 to 0.047				○				Ammo	() F3
	1000VDC	0.056 to 0.22					○			Ammo	() F3
		0.01 to 0.047	○							Reel	() F9
		0.01 to 0.047						○		Ammo	R() F
		0.056 to 0.22						○		Ammo	R() F
	1250VDC	0.001 to 0.1						○		Ammo	R() F
		0.001 to 0.022						○		Ammo	R() F
	125VAC	0.01 to 0.15			○					Ammo	() F6
		0.18 to 0.47					○			Ammo	() F3
		0.01 to 0.22						○		Ammo	R() F
		0.27 to 0.47						○		Ammo	R() F
	250VAC	0.01 to 0.033			○					Ammo	() F6
		0.01 to 0.047						○		Ammo	R() F
		0.056 to 0.22						○		Ammo	R() F

●Lead Spacing



Style	Lead Spacing
AD	5.0mm
AB	5.0mm
B	5.0mm
C	5.0mm
D	7.5mm
E	7.5mm

* See the column "Rating, Dimensions & Quantity Box" for packing quantity.

■Rating, Dimensions & Quantity/Ammo Box

●Rated voltage : 100VDC, Capacitance tolerance : ±5%(J), ±10%(K)

Part No	Cap. (μF)	Dimensions (mm)								Quantity		
		L max.	T max.	H max.		F	S	G max.	ød	Standard 5mm	Odd size 5mm	7.5mm Ammo
				Type-1	Type-2,3							
ECQE1564 F ()	0.56	12.0	5.5	10.9	15.9	10.0	10.0	1.0	0.60	500	—	—
ECQE1684 F ()	0.68	12.0	6.0	11.9	16.9	10.0	10.0	1.0	0.60			
ECQE1824 F ()	0.82	12.0	6.0	13.5	18.5	10.0	10.0	1.0	0.60			
ECQE1105 F ()	1.0	12.0	6.7	14.0	19.0	10.0	10.0	1.0	0.60		1,000	—
ECQE1125 F ()	1.2	18.5	5.5	12.8	17.8	15.0	10.0	1.0	0.60			
ECQE1155 F ()	1.5	18.5	6.0	13.4	18.4	15.0	10.0	1.0	0.80		500	600
ECQE1185 F ()	1.8	18.5	6.5	14.4	19.4	15.0	10.0	1.0	0.80			
ECQE1225 F ()	2.2	18.5	7.0	15.0	20.0	15.0	10.0	1.0	0.80			
ECQE1275 F ()	2.7	18.5	8.0	15.8	20.8	15.0	10.0	1.0	0.80			
ECQE1335 F ()	3.3	18.5	8.5	16.5	21.5	15.0	10.0	1.0	0.80	—	400	400
ECQE1395 F ()	3.9	26.0	7.0	16.4	21.4	22.5	15.0	1.0	0.80			
ECQE1475 F ()	4.7	26.0	7.5	17.0	22.0	22.5	15.0	1.0	0.80		—	—
ECQE1565 F ()	5.6	26.0	8.3	17.5	22.5	22.5	15.0	1.0	0.80			
ECQE1685 F ()	6.8	26.0	9.0	18.5	23.5	22.5	15.0	1.0	0.80			
ECQE1825 F ()	8.2	26.0	10.0	20.0	25.0	22.5	15.0	1.5	0.80			
ECQE1106 F ()	10.0	26.0	11.5	21.0	26.0	22.5	15.0	1.5	0.80			



 Suffix for lead crimped or taped type
 Cap. tol. code

StyleN,styleD:0.056 to 1.0 μF
 StyleT,styleB:1.2 to 10.0 μF

■Rating, Dimensions & Quantity/Ammo Box

●Rated voltage : 250VDC, Capacitance tolerance : ±5%(J), ±10%(K)

Part No	Cap. (μF)	Dimensions (mm)								Quantity		
		L max.	T max.	H max.		F	S	G max.	ød	Standard 5mm	Odd size 5mm	7.5mm Ammo
				Type-1	Type-2,3							
ECQE2103 F ()	0.01	10.3	4.3	7.4	12.4	7.5	7.5	1.0	0.60	1,000	—	1,000
ECQE2123 F ()	0.012	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2153 F ()	0.015	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2183 F ()	0.018	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2223 F ()	0.022	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2273 F ()	0.027	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2333 F ()	0.033	10.3	4.5	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2393 F ()	0.039	10.3	4.5	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2473 F ()	0.047	10.3	4.5	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2563 F ()	0.056	10.3	4.8	7.9	12.9	7.5	7.5	1.0	0.60			
ECQE2683 F ()	0.068	10.3	4.5	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2823 F ()	0.082	10.3	4.9	8.0	13.0	7.5	7.5	1.0	0.60			
ECQE2104 F ()	0.1	10.3	5.8	8.4	13.4	7.5	7.5	1.0	0.60			
ECQE2124 F ()	0.12	10.3	6.0	9.0	14.0	7.5	7.5	1.0	0.60			
ECQE2154 F ()	0.15	10.3	6.0	10.8	15.8	7.5	7.5	1.0	0.60			
ECQE2184 F ()	0.18	12.0	5.0	10.3	15.3	10.0	10.0	1.0	0.60	500	—	—
ECQE2224 F ()	0.22	12.0	5.5	10.5	15.5	10.0	10.0	1.0	0.60			
ECQE2274 F ()	0.27	12.0	6.0	11.5	16.5	10.0	10.0	1.0	0.60			
ECQE2334 F ()	0.33	12.0	6.5	12.0	17.0	10.0	10.0	1.0	0.60			
ECQE2394 F ()	0.39	18.5	4.9	12.0	17.0	15.0	10.0	1.0	0.60			
ECQE2474 F ()	0.47	18.5	5.3	12.5	17.5	15.0	10.0	1.0	0.60		1,000	—
ECQE2564 F ()	0.56	18.5	5.5	13.0	18.0	15.0	10.0	1.0	0.60			
ECQE2684 F ()	0.68	18.5	6.0	13.5	18.5	15.0	10.0	1.0	0.80	—	500	500
ECQE2824 F ()	0.82	18.5	6.5	14.5	19.5	15.0	10.0	1.0	0.80			
ECQE2105 F ()	1.0	18.5	7.4	15.0	20.0	15.0	10.0	1.0	0.80			
ECQE2125 F ()	1.2	18.5	8.0	15.9	20.9	15.0	10.0	1.0	0.80			
ECQE2155 F ()	1.5	18.5	9.0	16.8	21.8	15.0	10.0	1.0	0.80		400	400
ECQE2185 F ()	1.8	26.0	7.5	15.5	20.5	22.5	15.0	1.0	0.80			
ECQE2225 F ()	2.2	26.0	8.5	16.3	21.3	22.5	15.0	1.0	0.80	—	400	300
ECQE2275 F ()	2.7	26.0	9.4	17.0	22.0	22.5	15.0	1.0	0.80			
ECQE2335 F ()	3.3	26.0	10.3	18.0	23.0	22.5	15.0	1.5	0.80		—	—
ECQE2395 F ()	3.9	26.0	11.0	20.5	25.5	22.5	15.0	1.5	0.80			
ECQE2475 F ()	4.7	26.0	12.0	21.5	26.5	22.5	15.0	1.5	0.80			
ECQE2565 F ()	5.6	31.0	11.8	21.0	26.0	27.5	22.5	1.5	0.80			
ECQE2685 F ()	6.8	31.0	13.0	22.4	27.4	27.5	22.5	1.5	0.80			
ECQE2825 F ()	8.2	31.0	14.3	23.5	28.5	27.5	22.5	1.5	0.80			
ECQE2106 F ()	10.0	31.0	15.9	25.8	30.8	27.5	22.5	1.5	0.80			

 Suffix for lead crimped or taped type
 Cap. tol. code

StyleN,styleD:0.01 to 0.33 μF
 StyleT,styleB:0.039 to 10.0 μF

■ Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 400VDC, Capacitance tolerance : ±5%(J), ±10%(K)

Part No.	Cap. (μF)	Dimensions (mm)								Quantity.		
		L max.	T max.	H max.		F	S	G max.	ød	Standard 5mm	Odd size 5mm	Odd size 7.5mm
				Type-1	Type-2,3							
ECQE4103 □ F ()	0.01	10.3	4.3	7.4	12.4	7.5	7.5	1.0	0.60	1,000	—	1,000
ECQE4123 □ F ()	0.012	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE4153 □ F ()	0.015	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE4183 □ F ()	0.018	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE4223 □ F ()	0.022	10.3	4.8	7.9	12.9	7.5	7.5	1.0	0.60			
ECQE4273 □ F ()	0.027	10.3	5.5	8.0	13.0	7.5	7.5	1.0	0.60			
ECQE4333 □ F ()	0.033	10.3	6.0	9.0	14.0	7.5	7.5	1.0	0.60			
ECQE4393 □ F ()	0.039	12.0	4.9	8.0	13.0	10.0	10.0	1.0	0.60			
ECQE4473 □ F ()	0.047	12.0	5.0	8.3	13.3	10.0	10.0	1.0	0.60			
ECQE4563 □ F ()	0.056	12.0	5.0	10.0	15.0	10.0	10.0	1.0	0.60	500	—	1,000
ECQE4683 □ F ()	0.068	12.0	5.4	10.5	15.5	10.0	10.0	1.0	0.60			
ECQE4823 □ F ()	0.082	12.0	5.8	11.0	16.0	10.0	10.0	1.0	0.60			
ECQE4104 □ F ()	0.1	12.0	6.3	12.0	17.0	10.0	10.0	1.0	0.60			
ECQE4124 □ F ()	0.12	18.5	5.0	10.0	15.0	10.0	1.0	0.60				
ECQE4154 □ F ()	0.15	18.5	5.0	12.4	17.4	15.0	10.0	1.0	0.60			
ECQE4184 □ F ()	0.18	18.5	5.4	12.5	17.5	15.0	10.0	1.0	0.60			
ECQE4224 □ F ()	0.22	18.5	5.9	13.0	18.0	15.0	10.0	1.0	0.60			
ECQE4274 □ F ()	0.27	18.5	6.5	14.3	19.3	15.0	10.0	1.0	0.80			
ECQE4334 □ F ()	0.33	18.5	7.0	14.9	19.9	15.0	10.0	1.0	0.80	—	500	500
ECQE4394 □ F ()	0.39	18.5	7.5	15.4	20.4	15.0	10.0	1.0	0.80			
ECQE4474 □ F ()	0.47	18.5	7.8	17.0	22.0	15.0	10.0	1.0	0.80			
ECQE4564 □ F ()	0.56	26.0	6.5	16.0	21.0	22.5	15.0	1.0	0.80			
ECQE4684 □ F ()	0.68	26.0	7.0	16.5	21.5	22.5	15.0	1.0	0.80			
ECQE4824 □ F ()	0.82	26.0	7.9	17.3	22.3	22.5	15.0	1.0	0.80			
ECQE4105 □ F ()	1.0	26.0	8.5	18.0	23.0	22.5	15.0	1.0	0.80			
ECQE4125 □ F ()	1.2	26.0	9.5	18.9	23.9	22.5	15.0	1.0	0.80			
ECQE4155 □ F ()	1.5	31.0	9.5	19.0	24.0	27.5	22.5	1.0	0.80			
ECQE4185 □ F ()	1.8	31.0	11.0	20.5	25.5	27.5	22.5	1.5	0.80	—	—	—
ECQE4225 □ F ()	2.2	31.0	11.0	22.0	27.0	27.5	22.5	1.5	0.80			

StyleN,styleD:0.01 to 1.0 μF
StyleT,styleB:0.12 to 2.2 μF

● Rated voltage : 630VDC, Capacitance tolerance : ±5%(J), ±10%(K)

Part No.	Cap. (μF)	Dimensions (mm)								Quantity.			
		L max.	T max.	H max.		F	S	G max.		ød	Standard 5mm	Odd size 5mm	Odd size 7.5mm
				Type-1	Type-2,3			Type-1	Type-2,3				
ECQE6103 □ F ()	0.01	12.0	4.5	7.5	12.5	10.0	10.0	1.0	0.60	1,000	—	1,000	
ECQE6123 □ F ()	0.012	12.0	4.5	7.8	12.8	10.0	10.0	1.0	0.60				
ECQE6153 □ F ()	0.015	12.0	5.0	8.2	13.2	10.0	10.0	1.0	0.60				
ECQE6183 □ F ()	0.018	12.0	4.9	10.0	15.0	10.0	10.0	1.0	0.60				
ECQE6223 □ F ()	0.022	12.0	5.3	10.5	15.5	10.0	10.0	1.0	0.60				
ECQE6273 □ F ()	0.027	12.0	5.5	10.9	15.9	10.0	10.0	1.0	0.60				
ECQE6333 □ F ()	0.033	12.0	6.0	11.9	16.9	10.0	10.0	1.0	0.60	500	1,000	500	
ECQE6393 □ F ()	0.039	12.0	6.0	13.4	18.4	10.0	10.0	1.0	0.60				
ECQE6473 □ F ()	0.047	12.0	6.5	13.5	18.5	10.0	10.0	1.0	0.60				
ECQE6563 □ F ()	0.056	18.5	5.4	10.5	15.5	15.0	10.0	1.0	0.60				
ECQE6683 □ F ()	0.068	18.5	5.8	11.0	16.0	15.0	10.0	1.0	0.60				
ECQE6823 □ F ()	0.082	18.5	6.5	12.0	17.0	15.0	10.0	1.0	0.60				
ECQE6104 □ F ()	0.1	18.5	6.3	14.0	19.0	15.0	10.0	1.0	0.60	500	500	400	
ECQE6124 □ F ()	0.12	18.5	6.3	14.5	19.5	15.0	10.0	1.0	0.80				
ECQE6154 □ F ()	0.15	18.5	7.5	15.4	20.4	15.0	10.0	1.0	0.80				
ECQE6184 □ F ()	0.18	18.5	8.0	16.0	21.0	15.0	10.0	1.0	0.80				
ECQE6224 □ F ()	0.22	18.5	9.0	16.5	21.5	15.0	10.0	1.0	0.80				
ECQE6274 □ F ()	0.27	26.0	7.0	16.5	21.5	22.5	15.0	1.0	0.80				
ECQE6334 □ F ()	0.33	26.0	7.8	17.0	22.0	22.5	15.0	1.0	0.80	—	400	300	
ECQE6394 □ F ()	0.39	26.0	8.5	17.9	22.9	22.5	15.0	1.0	0.80				
ECQE6474 □ F ()	0.47	26.0	9.3	18.5	23.5	22.5	15.0	1.0	0.80				
ECQE6564 □ F ()	0.56	26.0	10.0	20.0	25.0	22.5	15.0	1.5	0.80				
ECQE6684 □ F ()	0.68	26.0	11.5	21.0	26.0	22.5	15.0	1.5	0.80				
ECQE6824 □ F ()	0.82	31.0	11.3	20.5	25.5	27.5	22.5	1.5	0.80				
ECQE6105 □ F ()	1.0	31.0	12.5	21.9	26.9	27.5	22.5	1.5	0.80				
ECQE6125 □ F ()	1.2	31.0	13.5	23.0	28.0	27.5	22.5	1.5	0.80				
ECQE6155 □ F ()	1.5	31.0	15.3	24.7	29.7	27.5	22.5	1.5	0.80				
ECQE6185 □ F ()	1.8	31.0	16.8	27.0	32.0	27.5	22.5	1.5	0.80				
ECQE6225 □ F ()	2.2	31.0	19.5	29.0	34.0	27.5	22.5	1.5	0.80				

— Suffix for lead crimped or taped type.
— Cap. tol. code

StyleN,styleD:0.01 to 0.047 μF
StyleT,styleB:0.056 to 2.2 μF

■ Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 1000VDC, 125VAC, Capacitance tolerance : ±5%(J), ±10%(K), ±20%(M)

Part No.	Cap. (μF)	Dimensions (mm)								Quantity
		L _{max.}	T _{max.}	H _{max.}		F		S	G _{max.}	ød
				Type-1	Type-2	Type-1	Type-2	Type-1	Type-1	
ECQE10102□ _F ()	0.001	15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60	500
ECQE10122□ _F ()	0.0012	15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60	
ECQE10152□ _F ()	0.0015	15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60	
ECQE10182□ _F ()	0.0018	15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60	
ECQE10222□ _F ()	0.0022	15.5	6.0	11.5	16.5	12.5	10.0	1.0	0.60	
ECQE10272□ _F ()	0.0027	15.5	6.5	12.0	17.0	12.5	10.0	1.0	0.60	
ECQE10332□ _F ()	0.0033	15.5	6.0	11.5	16.5	12.5	10.0	1.0	0.60	
ECQE10392□ _F ()	0.0039	15.5	6.5	12.0	17.0	12.5	10.0	1.0	0.60	
ECQE10472□ _F ()	0.0047	15.5	7.0	12.5	17.5	12.5	10.0	1.0	0.60	
ECQE10562□ _F ()	0.0056	15.5	7.5	13.0	18.0	12.5	10.0	1.0	0.60	400
ECQE10682□ _F ()	0.0068	15.5	7.0	12.5	17.5	12.5	10.0	1.0	0.60	500
ECQE10822□ _F ()	0.0082	15.5	6.5	12.0	17.0	12.5	12.5	1.0	0.60	
ECQE10103□ _F ()	0.01	15.5	6.0	11.0	16.0	12.5	12.5	1.0	0.60	
ECQE10123□ _F ()	0.012	15.5	6.0	12.0	17.0	12.5	12.5	1.0	0.60	
ECQE10153□ _F ()	0.015	15.5	7.0	12.5	17.5	12.5	12.5	1.0	0.60	400
ECQE10183□ _F ()	0.018	15.5	7.5	13.0	20.0	12.5	12.5	1.0	0.80	
ECQE10223□ _F ()	0.022	15.5	7.5	15.5	22.5	12.5	12.5	1.0	0.80	500
ECQE10273□ _F ()	0.027	21.0	6.0	13.0	18.0	17.5	12.5	1.0	0.80	
ECQE10333□ _F ()	0.033	21.0	6.5	14.0	19.0	17.5	12.5	1.0	0.80	
ECQE10393□ _F ()	0.039	21.0	7.0	14.5	19.5	17.5	12.5	1.0	0.80	400
ECQE10473□ _F ()	0.047	21.0	7.5	15.5	20.5	17.5	12.5	1.0	0.80	
ECQE10563□ _F ()	0.056	21.0	7.5	17.0	22.0	17.5	12.5	1.0	0.80	300
ECQE10683□ _F ()	0.068	21.0	8.5	18.0	23.0	17.5	12.5	1.0	0.80	
ECQE10823□ _F ()	0.082	21.0	9.0	18.5	23.5	17.5	12.5	1.0	0.80	—
ECQE10104□ _F ()	0.1	21.0	10.0	20.0	25.0	17.5	12.5	1.0	0.80	
ECQE10124□ _F ()	0.12	26.0	9.0	18.5	23.5	22.5	17.5	1.0	0.80	
ECQE10154□ _F ()	0.15	26.0	10.0	20.0	25.0	22.5	17.5	1.5	0.80	
ECQE10184□ _F ()	0.18	26.0	10.5	22.0	27.0	22.5	17.5	1.5	0.80	
ECQE10224□ _F ()	0.22	26.0	12.0	23.0	28.0	22.5	17.5	1.5	0.80	

— Suffix for lead crimped or taped type.

— Cap. tol. code

StyleD: 0.001 to 0.022 μF
StyleB: 0.027 to 0.22 μF

Note)

Making for rated voltage



Type E: (1000V)

Type F: (1000V, 125V~)

■ Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 1250VDC, 125VAC, Capacitance tolerance : ±5%(J), ±10%(K), ±20%(M)

Part No.	Cap. (μF)	Dimensions (mm)								Quantity
		L _{max.}	T _{max.}	H _{max.}		F	S	G _{max.}	ød	Ammo
				Type-1	Type-2					
ECQE12102□ _F ()	0.001	15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60	500
ECQE12122□ _F ()	0.0012	15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60	
ECQE12152□ _F ()	0.0015	15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60	
ECQE12182□ _F ()	0.0018	15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60	
ECQE12222□ _F ()	0.0022	15.5	6.0	11.5	16.5	12.5	10.0	1.0	0.60	
ECQE12272□ _F ()	0.0027	15.5	6.5	12.0	17.0	12.5	10.0	1.0	0.60	
ECQE12332□ _F ()	0.0033	15.5	6.0	11.5	16.5	12.5	10.0	1.0	0.60	
ECQE12392□ _F ()	0.0039	15.5	6.5	12.0	17.0	12.5	10.0	1.0	0.60	
ECQE12472□ _F ()	0.0047	15.5	7.0	12.5	17.5	12.5	10.0	1.0	0.60	400
ECQE12562□ _F ()	0.0056	15.5	7.5	13.0	18.0	12.5	10.0	1.0	0.60	
ECQE12682□ _F ()	0.0068	15.5	7.5	15.0	20.0	12.5	10.0	1.0	0.60	
ECQE12822□ _F ()	0.0082	21.0	5.0	12.0	17.0	17.5	12.5	1.0	0.60	500
ECQE12103□ _F ()	0.01	21.0	5.0	12.5	17.5	17.5	12.5	1.0	0.60	
ECQE12123□ _F ()	0.012	21.0	5.5	13.0	18.0	17.5	12.5	1.0	0.60	
ECQE12153□ _F ()	0.015	21.0	6.0	13.5	18.5	17.5	12.5	1.0	0.60	
ECQE12183□ _F ()	0.018	21.0	6.5	14.5	19.5	17.5	12.5	1.0	0.80	
ECQE12223□ _F ()	0.022	21.0	7.0	15.0	20.0	17.5	12.5	1.0	0.80	
ECQE12273□ _F ()	0.027	26.0	6.0	15.5	20.5	22.5	17.5	1.0	0.80	
ECQE12333□ _F ()	0.033	26.0	6.5	16.0	21.0	22.5	17.5	1.0	0.80	
ECQE12393□ _F ()	0.039	26.0	7.0	16.5	21.5	22.5	17.5	1.0	0.80	
ECQE12473□ _F ()	0.047	26.0	8.0	17.0	22.0	22.5	17.5	1.0	0.80	
ECQE12563□ _F ()	0.056	31.0	7.5	17.0	22.0	27.5	22.5	1.0	0.80	
ECQE12683□ _F ()	0.068	31.0	8.0	17.5	22.5	27.5	22.5	1.0	0.80	
ECQE12823□ _F ()	0.082	31.0	9.0	18.5	23.5	27.5	22.5	1.0	0.80	
ECQE12104□ _F ()	0.1	31.0	10.0	19.5	24.5	27.5	22.5	1.0	0.80	
ECQE12124□ _F ()	0.12	31.0	11.5	20.5	25.5	27.5	22.5	1.5	0.80	
ECQE12154□ _F ()	0.15	31.0	12.0	23.0	28.0	27.5	22.5	1.5	0.80	
ECQE12184□ _F ()	0.18	31.0	13.0	24.5	29.5	27.5	22.5	1.5	0.80	
ECQE12224□ _F ()	0.22	31.0	14.5	26.5	31.5	27.5	22.5	1.5	0.80	

 Suffix for lead crimped or taped type.
 Cap. tol. code

StyleD: 0.001 to 0.0068 μF
 StyleB: 0.0082 to 0.22 μF

Note)

Making for rated voltage
 Type E: (1250V)
 Type F: (1250V, 125V~)

■ Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 125VAC, Capacitance tolerance : ±5%(J), ±10%(K), ±20%(M)

Noise suppression Capacitors (Across-the-line)

Part No.	Cap. (μF)	Dimensions (mm)								Quantity		
		L max.	T max.	H max.		F	S	G max.	ød	Standard 5mm	Odd size 5mm	Odd size 7.5mm
				Type-1	Type-2,3							
ECQE1A103JF ()	0.01	10.5	4.5	7.5	12.5	7.5	7.5	1.0	0.60	1,000	—	1,000
ECQE1A123JF ()	0.012	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE1A153JF ()	0.015	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE1A183JF ()	0.018	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE1A223JF ()	0.022	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE1A273JF ()	0.027	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE1A333JF ()	0.033	10.5	4.5	7.8	12.8	7.5	7.5	1.0	0.60			
ECQE1A393JF ()	0.039	10.5	4.5	7.8	12.8	7.5	7.5	1.0	0.60			
ECQE1A473JF ()	0.047	10.5	5.5	8.0	13.0	7.5	7.5	1.0	0.60			
ECQE1A563JF ()	0.056	10.5	5.9	8.5	13.5	7.5	7.5	1.0	0.60			
ECQE1A683JF ()	0.068	10.5	6.3	9.4	14.4	7.5	7.5	1.0	0.60	500	—	1,000
ECQE1A823JF ()	0.082	10.5	6.5	9.8	14.8	7.5	7.5	1.0	0.60			
ECQE1A104JF ()	0.1	10.5	6.5	11.8	16.8	7.5	7.5	1.0	0.60			
ECQE1A124JF ()	0.12	12.5	5.9	11.5	16.5	10.0	10.0	1.0	0.60			
ECQE1A154JF ()	0.15	12.5	6.5	12.0	17.0	10.0	10.0	1.0	0.60			
ECQE1A184JF ()	0.18	12.5	7.0	12.5	17.5	10.0	10.0	1.0	0.60			
ECQE1A224JF ()	0.22	12.5	7.5	13.4	18.4	10.0	10.0	1.0	0.60			
ECQE1A274JF ()	0.27	18.5	6.3	12.0	17.0	15.0	10.0	1.0	0.60			
ECQE1A334JF ()	0.33	18.5	6.9	12.5	17.5	15.0	10.0	1.0	0.60			
ECQE1A394JF ()	0.39	18.5	7.4	13.0	18.0	15.0	10.0	1.0	0.60			
ECQE1A474JF ()	0.47	18.5	7.5	15.3	20.3	15.0	10.0	1.0	0.60			

* Capacitance value over 0.47μF is available. Please consult us.

StyleN, styleD: 0.01 to 0.22 μF

StyleT, styleB: 0.27 to 0.47 μF

● Rated voltage : 250VAC, Capacitance tolerance : ±5%(J), ±10%(K), ±20%(M)

Noise suppression Capacitors (Across-the-line)

Part No.	Cap. (μF)	Dimensions (mm)								Quantity		
		L max.	T max.	H max.		F	S	G max.	ød	Standard 5mm	Odd size 5mm	Odd size 7.5mm
				Type-1	Type-2							
ECQE2A103JF ()	0.01	12.5	5.5	10.8	15.8	10.0	10.0	1.0	0.60	500	—	1,000
ECQE2A123JF ()	0.012	12.5	6.0	11.5	16.5	10.0	10.0	1.0	0.60			
ECQE2A153JF ()	0.015	12.5	6.3	9.9	14.9	10.0	10.0	1.0	0.60			
ECQE2A183JF ()	0.018	12.5	6.0	11.9	16.9	10.0	10.0	1.0	0.60			
ECQE2A223JF ()	0.022	12.5	6.0	11.5	16.5	10.0	10.0	1.0	0.60			
ECQE2A273JF ()	0.027	12.5	5.5	10.9	15.9	10.0	10.0	1.0	0.60			
ECQE2A333JF ()	0.033	12.5	6.0	11.9	16.9	10.0	10.0	1.0	0.60			
ECQE2A393JF ()	0.039	12.5	6.0	13.4	18.4	10.0	10.0	1.0	0.60			
ECQE2A473JF ()	0.047	12.5	6.5	14.4	19.4	10.0	10.0	1.0	0.60			
ECQE2A563JF ()	0.056	18.5	5.4	10.5	15.5	15.0	10.0	1.0	0.60			
ECQE2A683JF ()	0.068	18.5	5.8	11.0	16.0	15.0	10.0	1.0	0.60	—	500	1,000
ECQE2A823JF ()	0.082	18.5	6.3	12.0	17.0	15.0	10.0	1.0	0.60			
ECQE2A104JF ()	0.1	18.5	6.3	14.0	19.0	15.0	10.0	1.0	0.60			
ECQE2A124JF ()	0.12	18.5	6.8	14.5	19.5	15.0	10.0	1.0	0.80			
ECQE2A154JF ()	0.15	18.5	7.5	15.4	20.4	15.0	10.0	1.0	0.80			
ECQE2A184JF ()	0.18	18.5	8.0	16.0	21.0	15.0	10.0	1.0	0.80			
ECQE2A224JF ()	0.22	18.5	9.0	16.9	21.9	15.0	10.0	1.0	0.80			
ECQE2A274JF ()	0.27	26.0	7.0	16.5	21.5	22.5	15.0	1.0	0.80			
ECQE2A334JF ()	0.33	26.0	7.8	17.0	22.0	22.5	15.0	1.0	0.80			
ECQE2A394JF ()	0.39	26.0	8.5	17.9	22.9	22.5	15.0	1.0	0.80			
ECQE2A474JF ()	0.47	26.0	9.3	18.5	23.5	22.5	15.0	1.0	0.80			

Suffix for lead crimped or taped type.

Cap. tol. code

styleD: 0.01 to 0.047 μF

styleB: 0.056 to 0.47 μF

* When using these capacitors as an across-the-line capacitor it shall be required to follow either item 1. or item 2. condition.

1. Capacitor shall be connected in parallel with varistor (Specified varistor voltage in table 1.)

2. Voltage applied for capacitor shall not exceed other than specified in table 1, when using these capacitors.

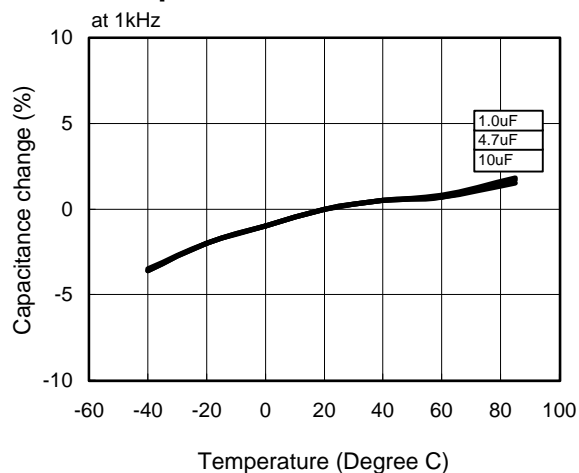
Table 1

Cap. Rated Voltage	Varistor voltage	Pulse voltage
125VAC	250V	250V _{0-P}
250VAC	470V	630V _{0-P}

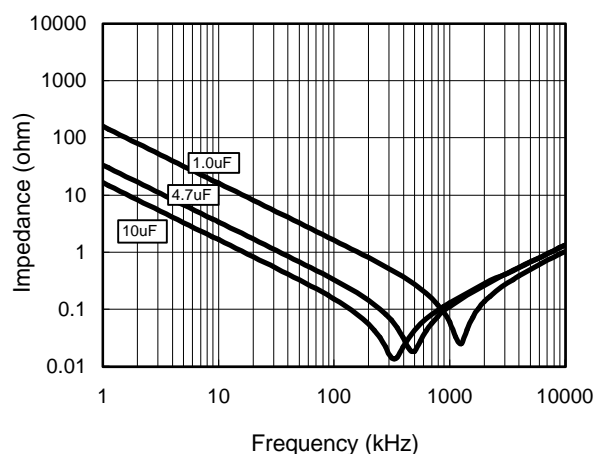
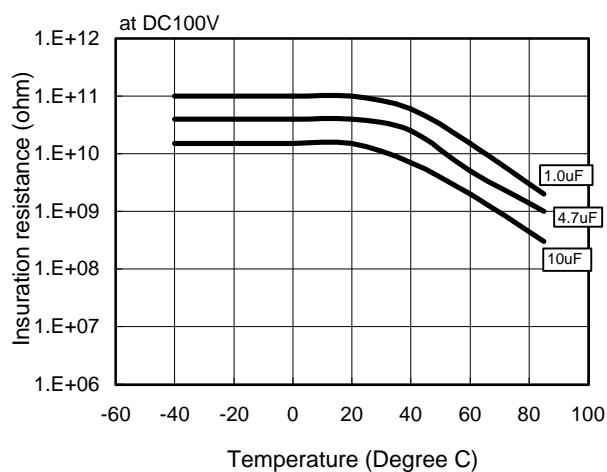
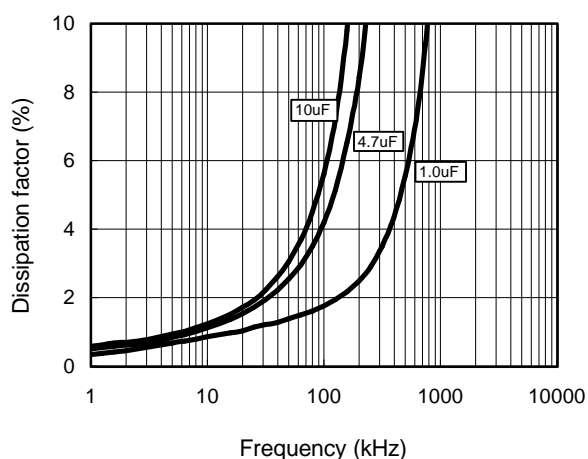
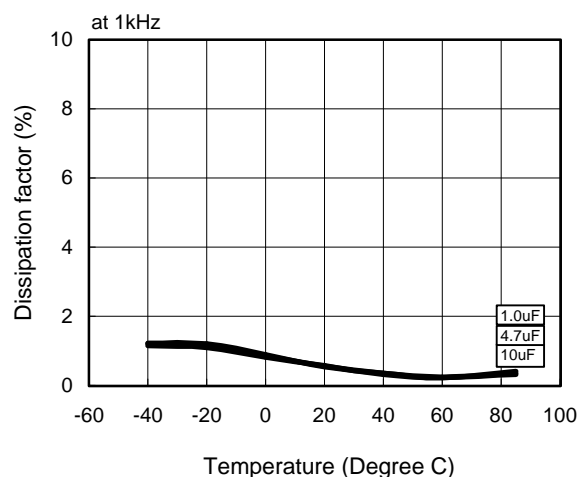
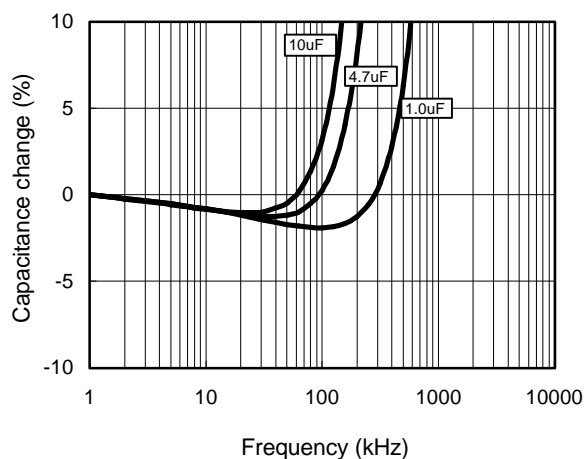
ECQE(F) Type 100VDC Series (Metallized Polyester Film)

Electrical Characteristics <Typical Data>

Temperature Characteristics



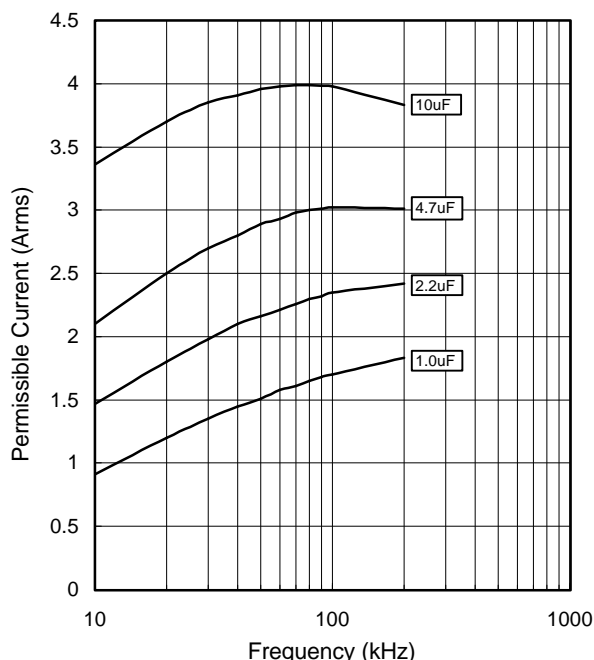
Frequency Characteristics



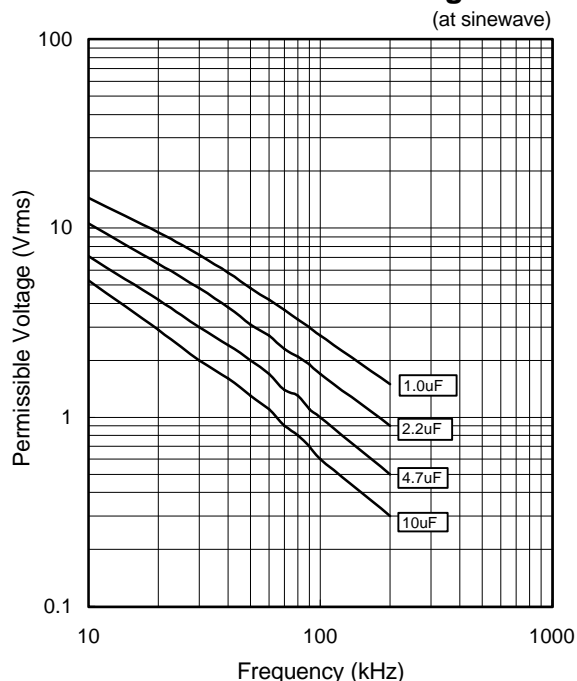
ECQE(F) Type 100VDC Series (Metallized Polyester Film)

Applicable Specifications

Permissible Current



Permissible Voltage

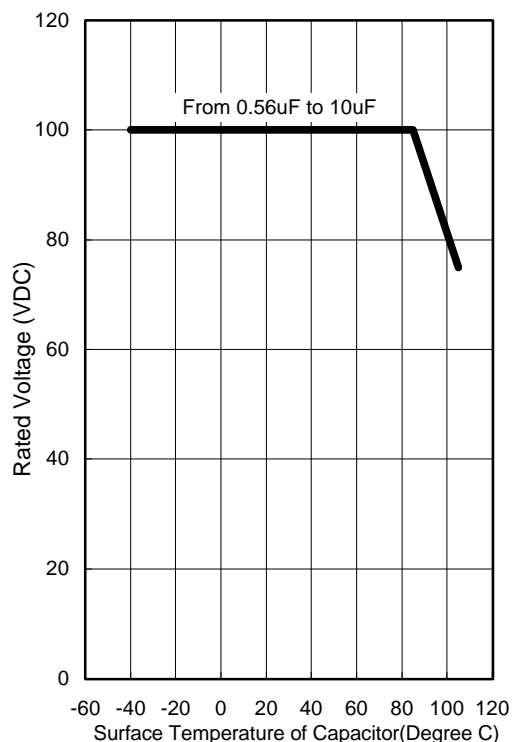


Pulse Handling Capability (dV/dt)

(Max 10000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
100VDC	0.56	564	22	12.32
	0.68	684		15.0
	0.82	824		18.0
	1.00	105		22.0
	1.20	125	11	13.2
	1.50	155		17.1
	1.80	185		19.8
	2.20	225		24.2
	2.70	275	6	29.7
	3.30	335		36.3
	3.90	395		23.4
	4.70	475		28.2
	5.60	565		33.6
	6.80	685		40.8
	8.20	825		49.2
	10.00	106		60.0

Voltage Derating by Temperature

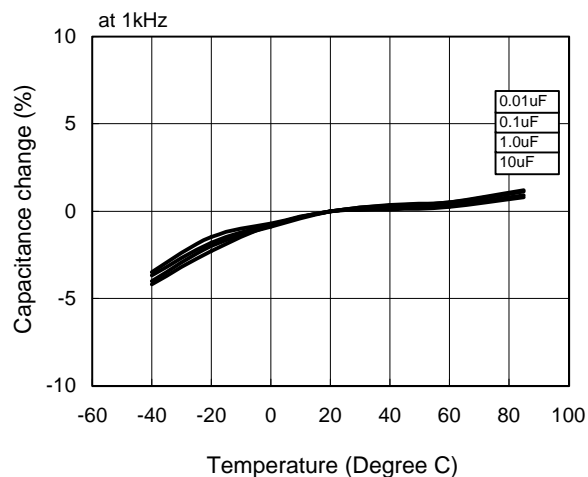


* Please consult Panasonic if your condition exceeds the above spec.

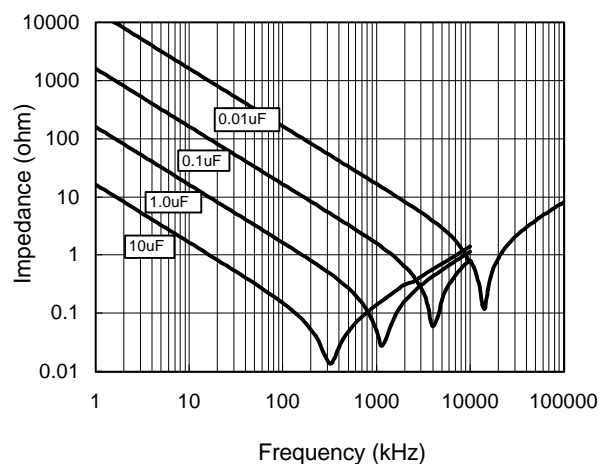
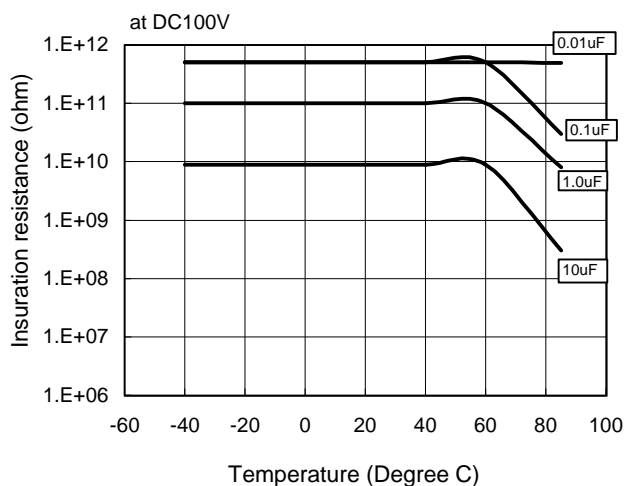
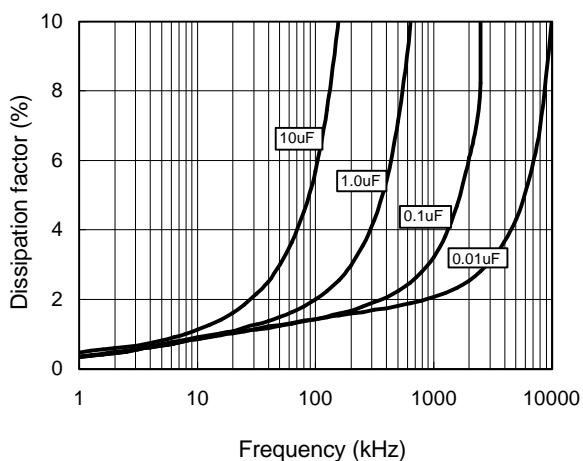
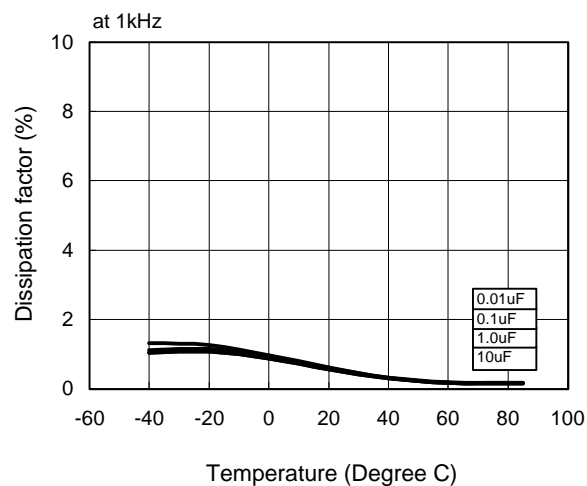
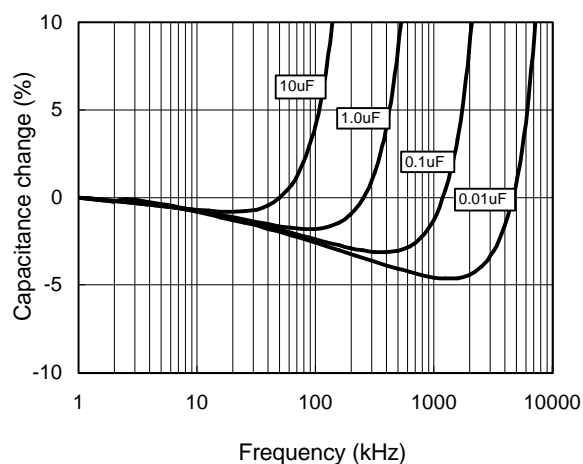
ECQE(F) Type 250VDC Series (Metallized Polyester Film)

Erectrical Characteristics <Typical Data>

Temperature Characteristics



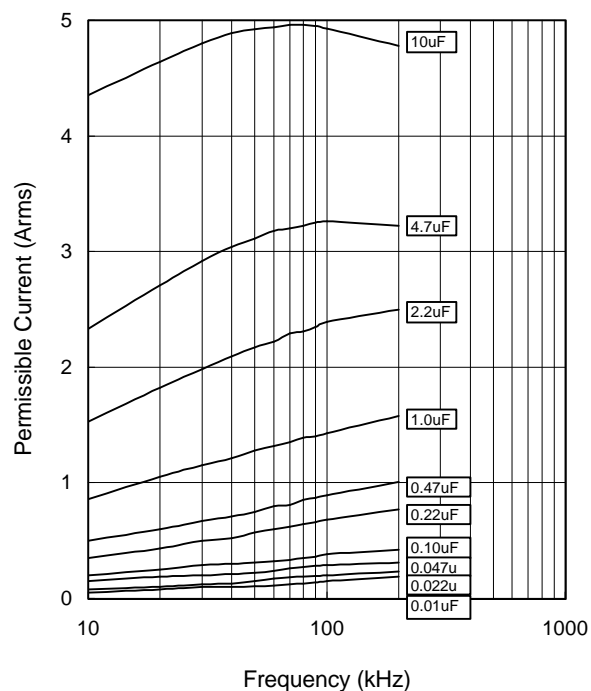
Frequency Characteristics



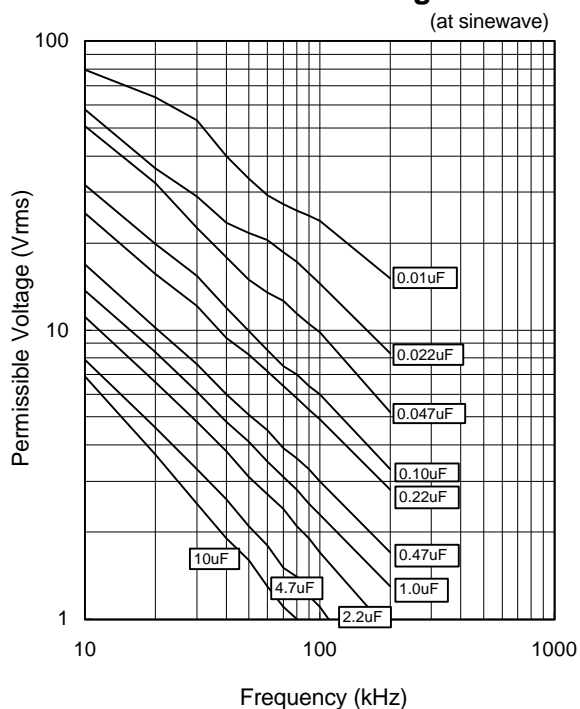
ECQE(F) Type 250VDC Series (Metallized Polyester Film)

Applicable Specifications

Permissible Current



Permissible Voltage

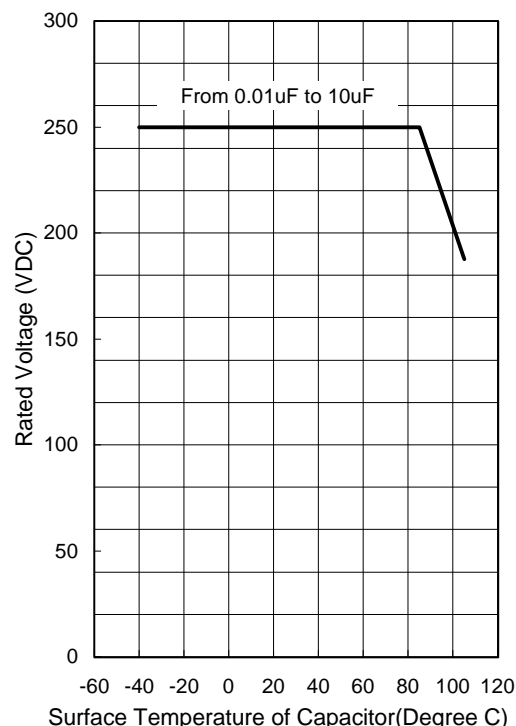


Pulse Handling Capability (dV/dt)

(Max 10000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
250VDC	0.010	103	48	0.48
	0.015	153		0.72
	0.022	223		1.06
	0.033	333		1.58
	0.047	473		2.26
	0.068	683		3.26
	0.100	104		4.80
	0.150	154		7.20
	0.220	224	33	7.26
	0.330	334		10.89
	0.470	474		8.46
	0.680	684	18	12.24
	1.000	105		18.00
	1.500	155		27.00
	2.200	225	10	22.00
	3.300	335		33.00
	4.700	475		47.00
	6.800	685	8	54.40
	10.000	106		80.00

Voltage Derating by Temperature

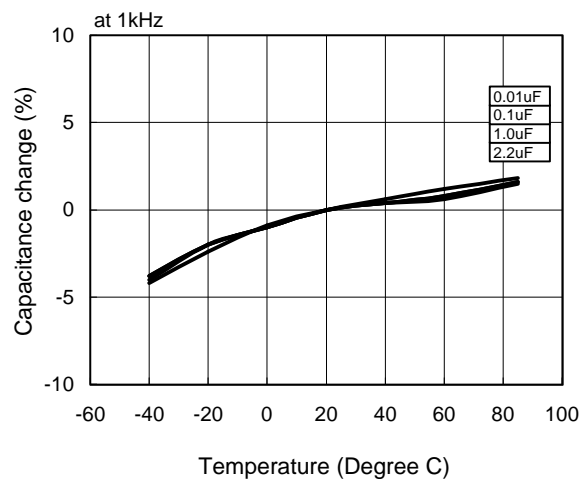


* Please consult Panasonic if your condition exceeds the above spec.

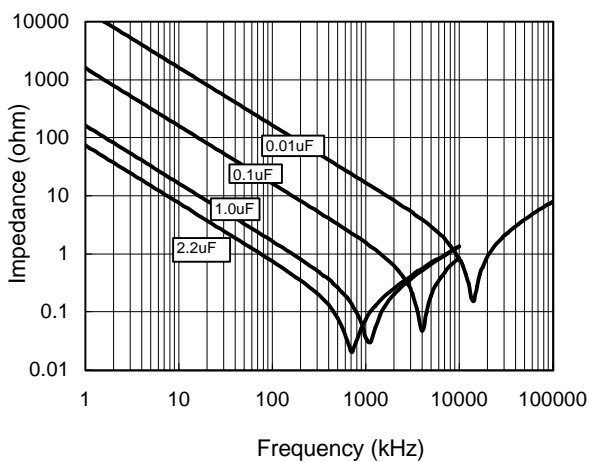
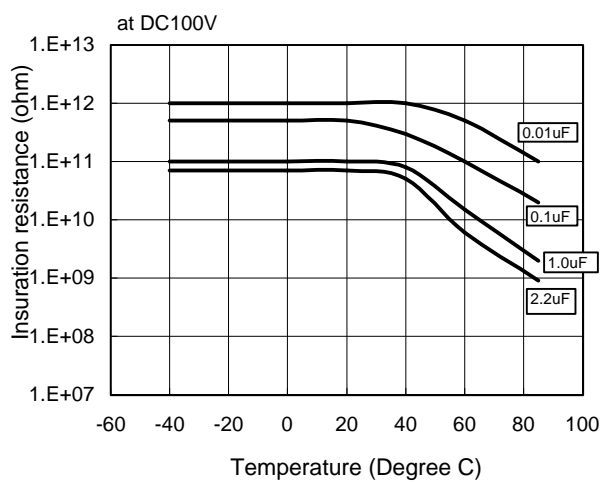
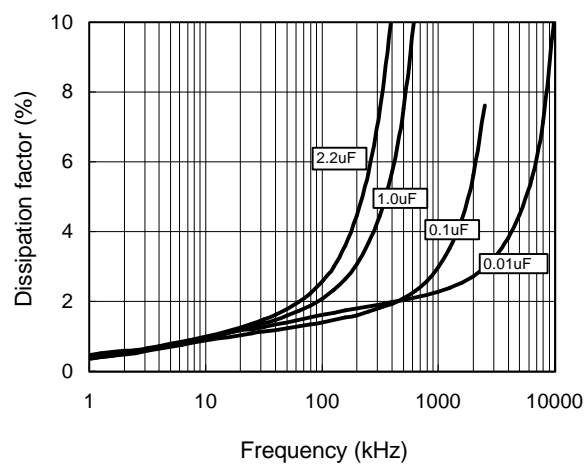
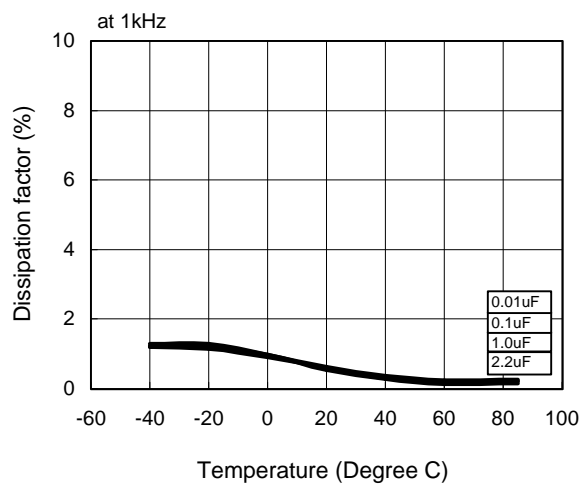
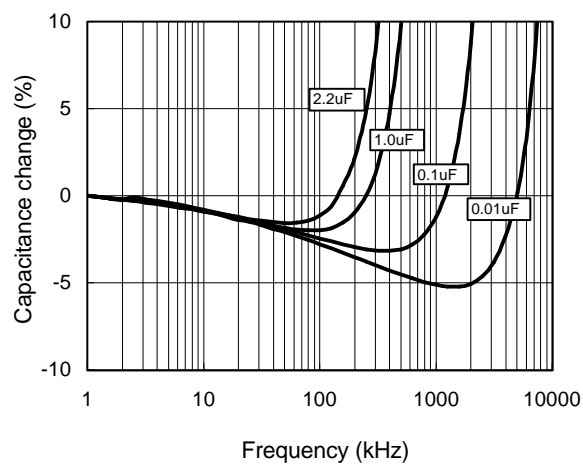
ECQE(F) Type 400VDC Series (Metallized Polyester Film)

Erectrical Characteristics <Typical Data>

Temperature Characteristics



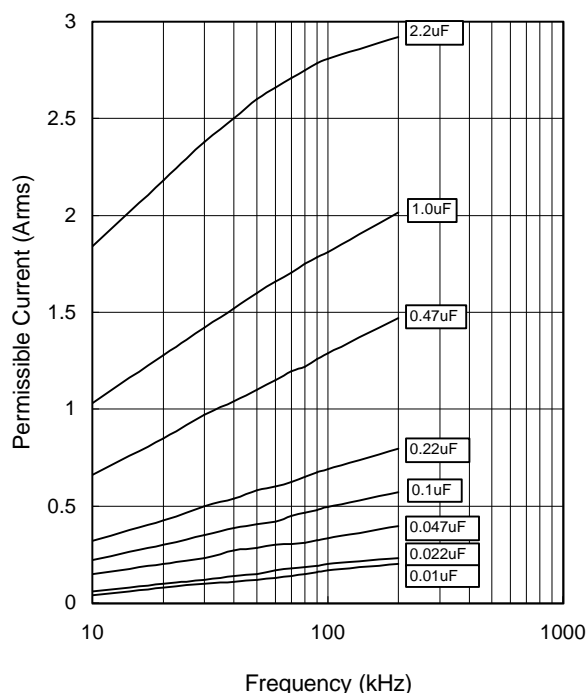
Frequency Characteristics



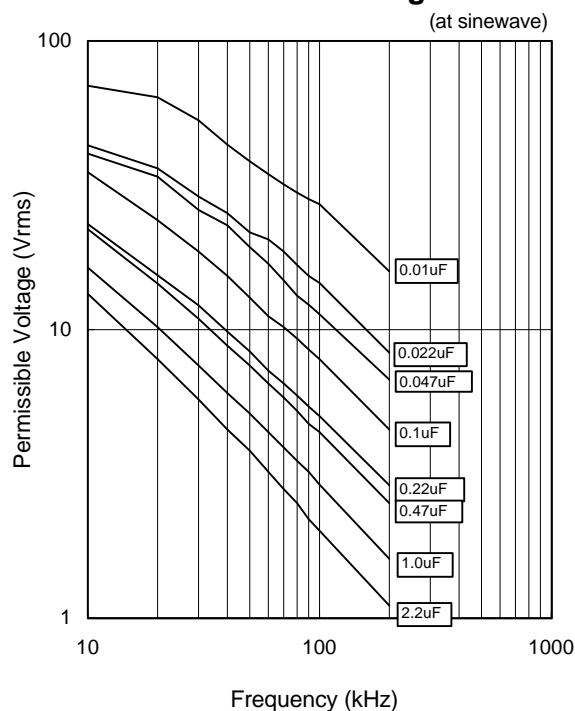
ECQE(F) Type 400VDC Series (Metallized Polyester Film)

Applicable Specifications

Permissible Current



Permissible Voltage

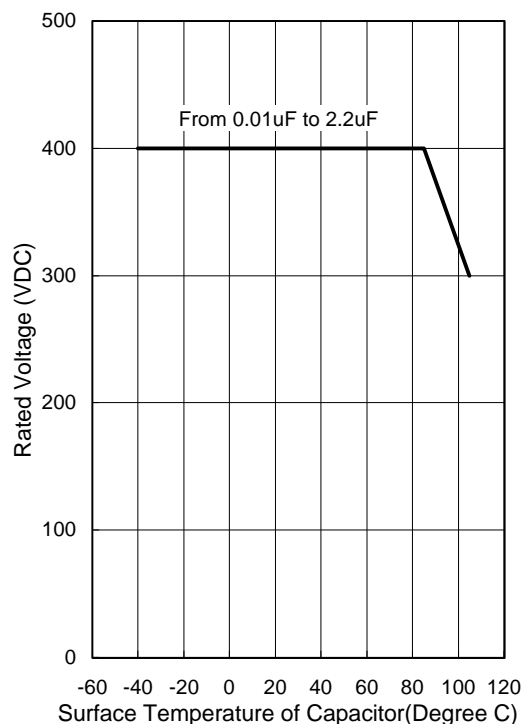


Pulse Handling Capability (dV/dt)

(Max 10000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
400VDC	0.010	103	131	1.31
	0.015	153		1.97
	0.022	223		2.88
	0.033	333		4.32
	0.047	473	78	3.67
	0.068	683		5.30
	0.100	104		7.80
	0.150	154	37	5.55
	0.220	224		8.14
	0.330	334		12.21
	0.470	474		17.39
	0.680	684	22	14.96
	1.000	105		22.00
	1.200	155	18	27.00
	2.200	225		39.60

Voltage Derating by Temperature

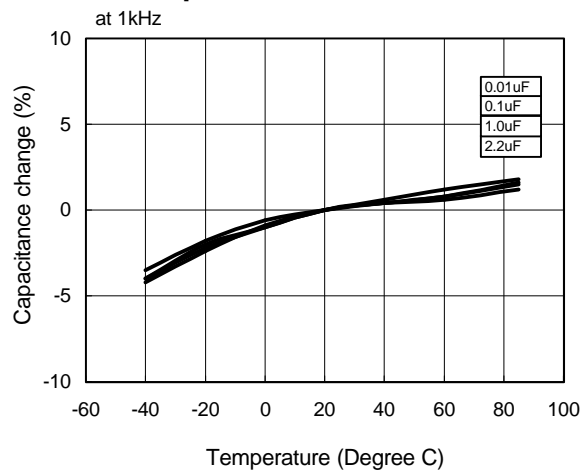


* Please consult Panasonic if your condition exceeds the above spec.

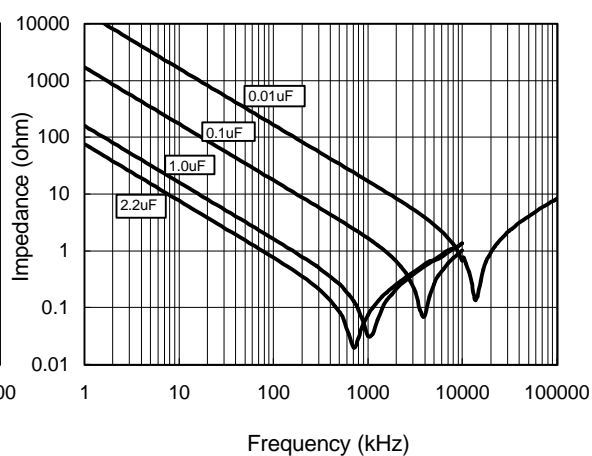
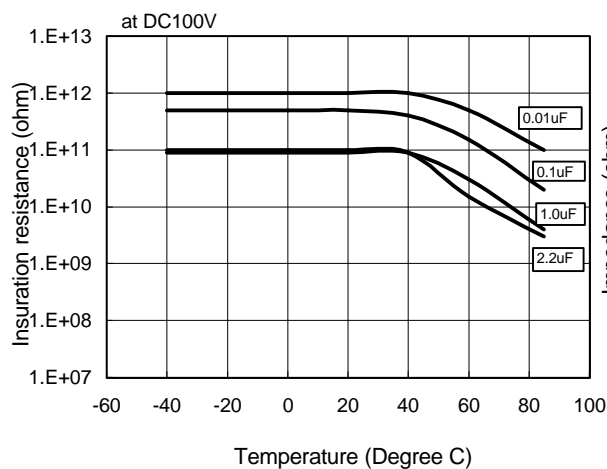
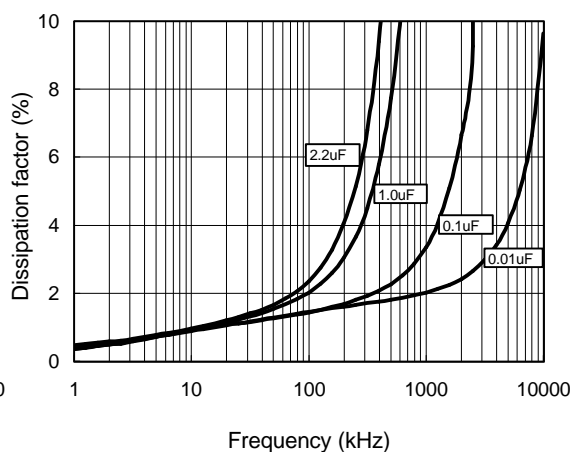
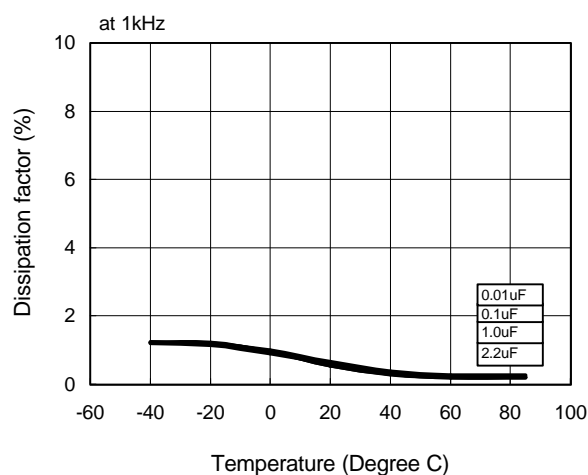
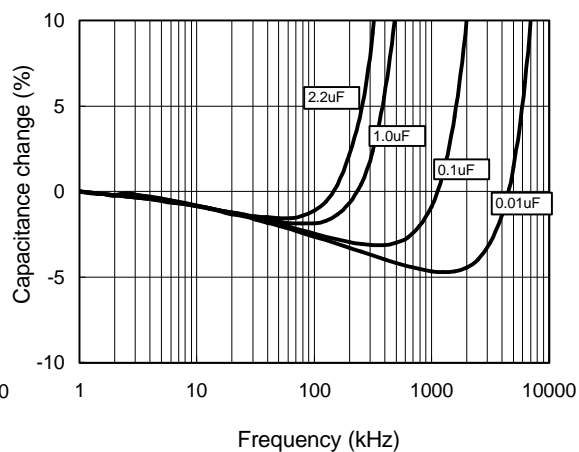
ECQE(F) Type 630VDC Series (Metallized Polyester Film)

Erectrical Characteristics <Typical Data>

Temperature Characteristics



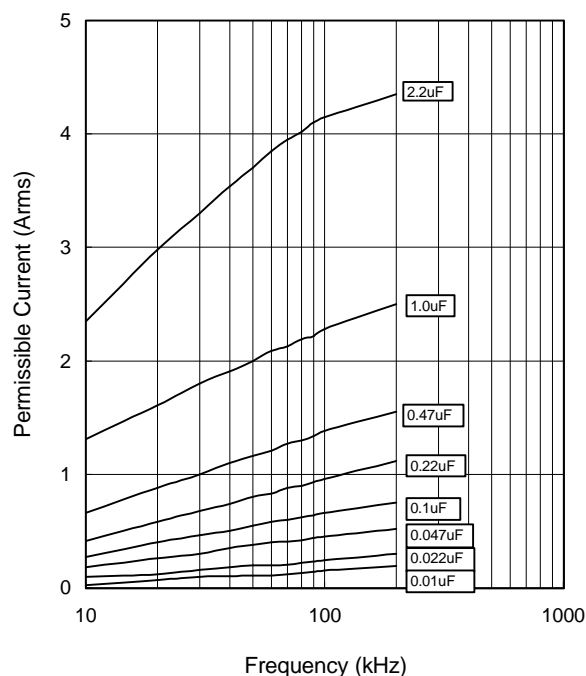
Frequency Characteristics



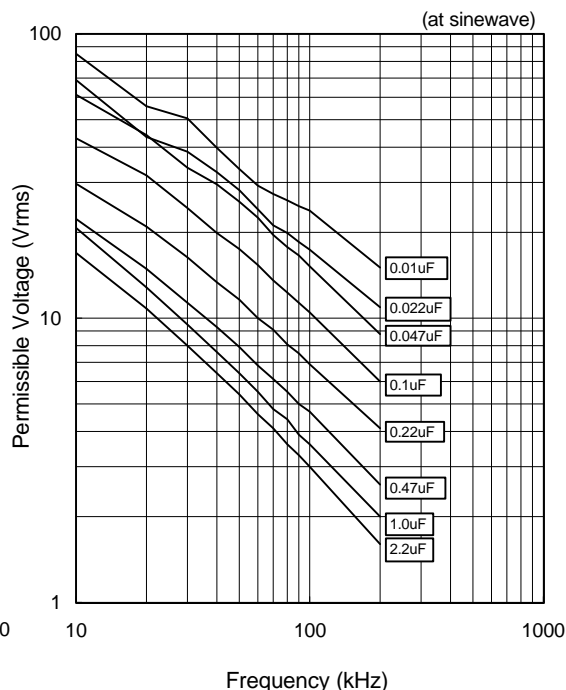
ECQE(F) Type 630VDC Series (Metallized Polyester Film)

Applicable Specifications

Permissible Current



Permissible Voltage

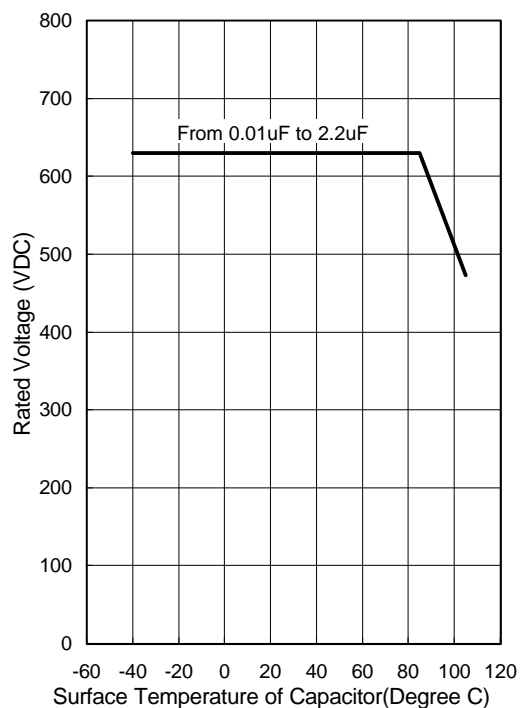


Pulse Handling Capability (dV/dt)

(Max 10000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
630VDC	0.010	103	273	2.73
	0.015	153		4.10
	0.022	223		6.01
	0.033	333		9.01
	0.047	473		12.83
	0.068	683	116	7.89
	0.100	104		11.60
	0.150	154		17.40
	0.220	224		25.52
	0.330	334	63	20.79
	0.470	474		29.61
	0.680	684		42.84
	1.000	105	48	48.00
	1.500	155		72.00
	2.200	225		105.60

Voltage Derating by Temperature



* Please consult Panasonic if your condition exceeds the above spec.